



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/393,647 09/10/99 WOLTER H 060953/0122

FOLEY & LARDNER
3000 K STREET N W
SUITE 500 P O BOX 25696
WASHINGTON DC 20007-8696

IM22/0913

EXAMINER

FORTUNA, A

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 09/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/393,647

Applicant(s)

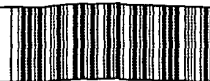
Wolter et al.

Examiner

Ana Fortuna

Group Art Unit

1723



☒ Responsive to communication(s) filed on Sep 10, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1723

1. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is unclear as to whether the compound of the formula I correspond to element or compound "(I)", since the compound of the formula II is (ii), and the other compounds are under (iii) ...successively. The claim is redundant, since in (v), a combination of the compounds of the formulas I-IV are claimed, and in the same claim adding a compound of the formula V optionally is also claimed. The claim is unclear as to the combination of formulas intended in the membrane made by the particular mixture of compounds. Claim 7 is unclear and redundant since including at least one compound of the formula I in claimed in claim 1. Claims 9-10 lack antecedent basis, since the compound of the formula VI is not claimed in the previous claims.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 11-14, 15-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Scholze et al. (4,238,590). Reference '490 discloses a membrane made from the polycondensate formula claimed (column 1, lines 57-68, column 2-55), which ~~can~~^{will} result in formula III, IV, or V of

Art Unit: 1723

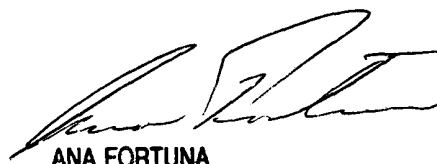
the claimed intention. Mixtures of all the compounds of the claimed formulas in the membrane is not disclosed. Regarding claim 2 polycondensation in presence of a catalyst is disclosed (column 4, lines 52-65). The membrane is pore and is suitable for filtration of aqueous solutions. Regarding claim 11, the compound having at least one amino group, e.g. by the addition of the catalyst is also disclosed (column 4, lines 52-54). The product derived from a hydrolyzable silicic acid derivative is disclosed (abstract). Salt addition, e.g. sodium hydroxide is also disclosed (column 4, lines 52-65), therefore, the presence of the salt is expected to form the pores in the membrane. Heat treatment is disclosed by '590 (column 5, lines 25-50). The limitations of claim 17 is disclosed (column 7, lines 16-45). The membrane formed on a support is also disclosed (column 6, lines 14-38). It would have been obvious to one skilled in the pertinent art to select conventional supports having flat or tubular shape, as support for the silane derived membrane.

4. Claims 1-2, 4, 6, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholze et al. (4,374,933). Reference '933 discloses a porous membrane made from silicic acid heteropolycondensates of the claimed formula, in presence of a catalyst, and is used in separation of aqueous or gaseous medium (columns 1-8, and column 9, lines 1-15). The membrane made from mixtures of more than one of the claimed formulas and the formulas detailed in the way as claimed in the present invention is not disclosed, but the formula and compound disclosed in '933 correspond to at least one of the claimed formulas when substituting the different groups in the general formula.

Art Unit: 1723

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana Fortuna whose telephone number is (703) 308-3857.

Facsimile No. (703)-305-7718.



ANA FORTUNA
PRIMARY EXAMINER
GROUP 1300
1723

Ana Fortuna

September 11, 2000